

2023+ Ford F-150 Raptor R

HEADER INSTALLATION INSTRUCTIONS

Thanks for purchasing a Stainless Works Header system for your 2023+ Ford F-150 Raptor R. Our team has worked to ensure that this product is the premium in performance, quality, and fitment. We are proud to say that this system will unleash the true character of your vehicle. We encourage you to read through the following steps, and check the included Bill of Materials before beginning. Please follow these steps to ensure that your installation goes as planned.



2023 Ford F-150 Raptor R
(FTR25HCAT)

a. Stainless Works recommends the use of Hi-Temp RTV sensor safe silicone gasket maker as an option or in conjunction with the use of factory gaskets. The recommended Oxygen Sensor Safe RTV is either Valco All-in-One Aluminum or Permatex Copper P/N 101BR available at NAPA, Autozone and other retailers.

b. Disconnect the battery before starting to work on the exhaust system for your vehicle. Reconnect the battery when the job is completed.

c. Your exhaust system can be installed by a weekend warrior, but the use of a lift is recommended for ease of installation. If using a jack, the vehicle must be placed on a hard level surface. Jack stands are required for safety.

d. You will assemble the components together as specified below, but only snug the clamps as you move along from front to back. After aligning all the components in the vehicle, you will tighten all the clamps working from front to back of the vehicle.



Detail a

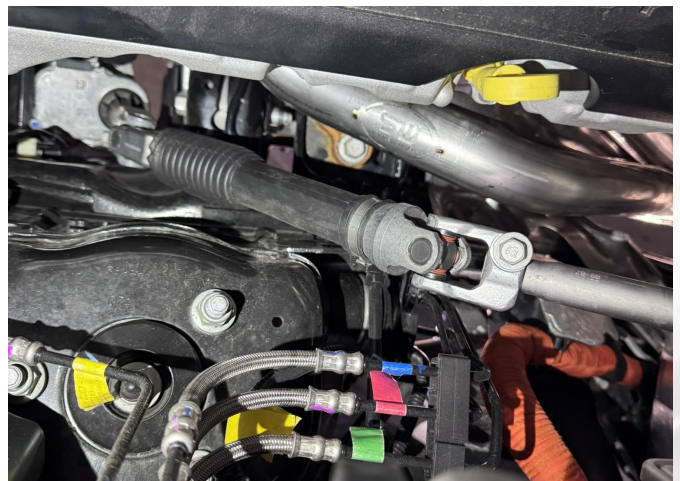
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DISASSEMBLY

1. Disconnect the battery.
2. Raise and support the vehicle.
3. Remove black skid plate. (4x13mm + 2x10mm)
4. Unclip O2 plugs from each downpipe and remove O2 sensors.
5. Unbolt skid plate attached to transmission brace. (4x13mm) .
6. Support the transmission and unbolt the transmission from transmission brace (2x 21mm nuts).
7. Unbolt transmission crossmember and either let it hang gently or move to the side (4x 18mm bolts).
8. Unbolt and both driver and passenger manifold lead y-pipe (4x 15mm nuts).
9. Unbolt and remove y-pipe after loosening the clamp on the passenger side and sliding it towards the rear of the vehicle, unbolting driver side from flange. **Set factory bolts to the side for later.** (4x15mm)
10. Remove the passenger side fender flare and wheel liner. (8mm)
11. Unbolt steering shaft and move to the side for easier access to bolts and studs. *OPTIONAL* (1x10mm)
12. Unbolt and remove heat shields on both driver and passenger side. (Passenger side may need to be cut out to be removed).
13. Unbolt and remove passenger side and driver side manifolds.



Detail 10: Passenger Side Fender Removed .



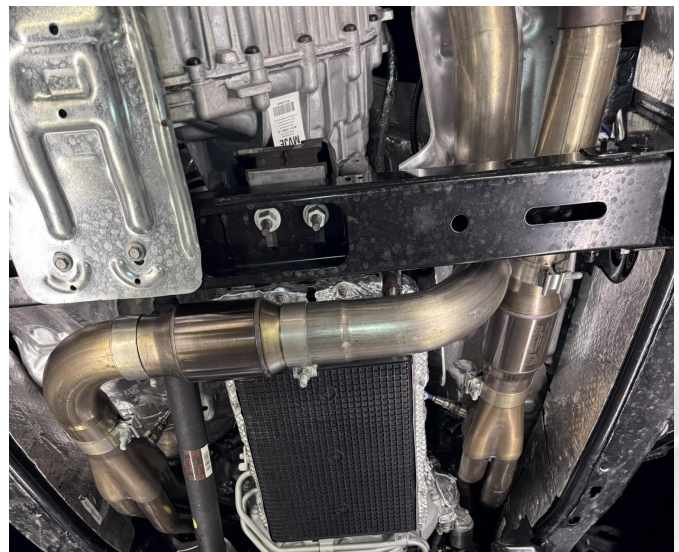
Detail 11: Unbolt and move steering shaft to the side.

ASSEMBLY

14. Use the provided RTV to create a seal on the header flanges. Allow RTV to get tacky (about 15 minutes).
15. Install the headers using the provided header bolts (10x 10mm bolts).
16. Install left and right lead pipes and catalytic converters using supplied 3" clamps.
17. Adjust and tighten from front to back ensuring full clearance from any part of the vehicle.
18. Reinstall the O₂ sensors using the provided extensions. For the driver side rear O₂ run it up and over the transmission. Passenger side can be ran over top of the factory heat shield.
19. Check that all components removed during installation have been re-installed and torqued to spec
20. Be sure to have adequate clearance around all wires, hoses, and lines. If anything is in contact with the exhaust system it will melt. Make sure to have at least ½" of clearance and wrap any suspect areas with DEI thermal barrier wrap.
21. After double checking for clearance and making sure all lines, wires and hoses are secured, drive the vehicle for 10-20 miles and re-check all clamps and clearances. Your system may be tack welded at the joints/ clamps to reduce shifting of the system during heating and cooling cycles. Make certain to disconnect the battery before performing any welding.



Detail 18: O₂ Extension is run over top of the transmission and ziptied into place.



Detail 21: Headers and leads installed